

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Lebel, Edouard
Heifetz, Peter
Ward, Eric
Uknes, Scott

(ii) TITLE OF INVENTION: Novel Transgenic Plants

(iii) NUMBER OF SEQUENCES: 19

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Novartis Corporation
(B) STREET: 3054 Cornwallis Road
(C) CITY: Research Triangle Park
(D) STATE: NC
(E) COUNTRY: USA
(F) ZIP: 27709

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: US 09/254,780
(B) FILING DATE: 10-MARCH-1999
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PCT/US97/16187
(B) FILING DATE: 12-SEP-1997

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 60/054,528
(B) FILING DATE: 04-AUG-1997

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US 60/025,985
(B) FILING DATE: 12-SEP-1996

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Meigs, J. Timothy
(B) REGISTRATION NUMBER: 38,241
(C) REFERENCE/DOCKET NUMBER: CGC1884/PCT

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 919-541-8587
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(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Consensus translation initiator sequence for the expression of the E. coli uidA gene in plants, as suggested by Clontech."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1: <

GTCGACCATG GTC

13

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Consensus translation initiator sequence for the expression of the E. coli uidA gene in plants, as suggested by Joshi."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TAAACAAATGG CT

12

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 22 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Molecular adaptor used to generate the vector pCGNSENX."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

AATTCTAAAG CATGCCGATC GG

22

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Molecular adaptor used to generate the vector pCGNSENX."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

AATTCCGATC GGCATGCTTT A

21

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 22 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Molecular adaptor used in making pCGN1761NENX."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

AATTCTAAC CATGGCGATC GG

22

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Molecular adaptor used in making pCGN1761NENX."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

AATTCCGATC GCCATGGTTT A

21

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Molecular adaptor sequence used in making vector pCGN1761/CT."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

CCAGCTGGAA TTCCG

15

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Molecular adaptor sequence used in making vector pCGN1761/CT."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

CGGAATTCCA GCTGGCATG

19

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Primer E11"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GCGCCCATGG ACGAAGTCAA CCAGATTGC

30

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 24 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Primer E12"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

CCAGTCGACG TTGGAGGTGA AGAC

24

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 31 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Primer E21"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GCGCGCCATG GCCAATGATT CTCCGTTCTA C

31

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 24 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Primer E22"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GGGACGGTTC TTCAGTCCGG CAGC

24

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 29 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Primer E51"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

CGCCCATGGC CGGTCTCACC GCCACAGTC

29

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Primer E52"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GACGACCTCC CACTGGGAGA CGGTG

25

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 31 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Primer VAC1"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

CATGCCATGG GTGAGGCCTC CGAGCTGTTC C

31

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Primer VAC2"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

TGCGAGCTCT TACATAGTAT CGACTAAAAG TCCGGACTGG AGCTTGCTCC GCAC

54

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Sequence present in plasmid pC8 that includes a StuI site (Example C2)."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

CGAGGGCCTCG

10

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Top strand of oligonucleotide linker used in Example C3."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

CATGGCTTCC TCAGTTCTTT CCTCTGCA

28

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "Bottom strand of
oligonucleotide linker used in Example C3."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GAGGAAAGAA CTGAGGAAGC

20